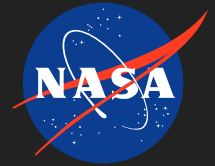


Optical Shield for a Starshade Petal, Phase I

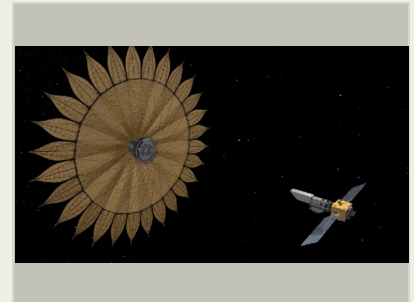
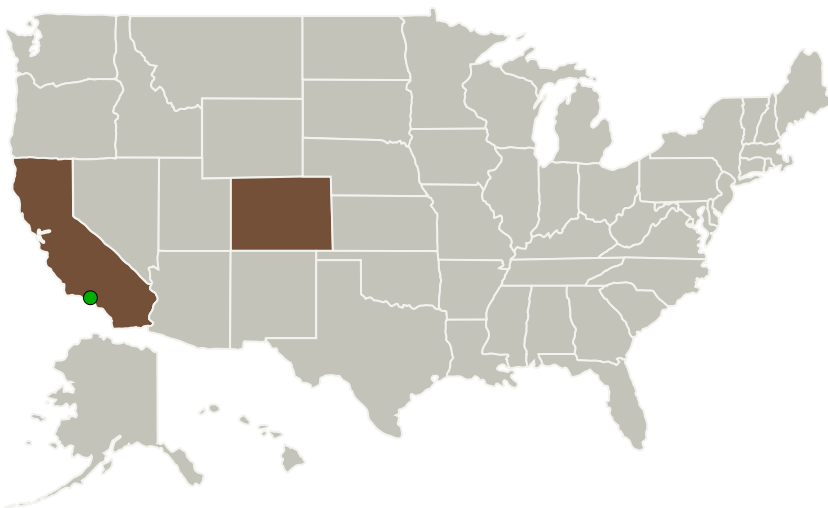
Completed Technology Project (2016 - 2016)



Project Introduction

The goal of this Phase I SBIR program is to design and develop a segmented optical shield that can be integrated to a petal structure and meet the precision, ground handling, packaging, launch and on-orbit environmental requirements. There will be an emphasis on the optical shield to petal interface to minimize CTE effects. The optical shields will also be optimized to support the petals during launch. The Ph1 program will involve numerous hardware demonstration units and testing.


Primary U.S. Work Locations and Key Partners



Optical Shield for a Starshade Petal, Phase I

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Organizations Performing Work	Role	Type	Location
Tendeg LLC	Lead Organization	Industry Small Disadvantaged Business (SDB)	Louisville, Colorado
 Jet Propulsion Laboratory (JPL)	Supporting Organization	NASA Center	Pasadena, California

Primary U.S. Work Locations

California	Colorado
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Optical Shield for a Starshade Petal, Phase I

Completed Technology Project (2016 - 2016)



Project Transitions



June 2016: Project Start

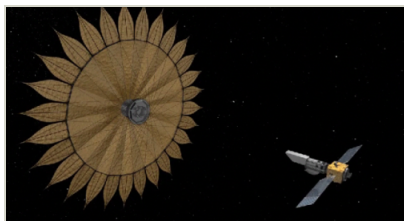


December 2016: Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/139802>)

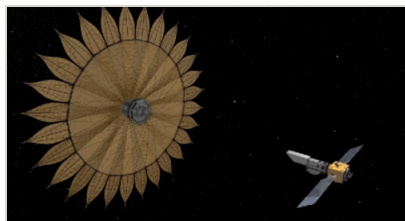
Images



Briefing Chart Image

Optical Shield for a Starshade
Petal, Phase I

(<https://techport.nasa.gov/image/130471>)



Final Summary Chart Image

Optical Shield for a Starshade
Petal, Phase I Project Image

(<https://techport.nasa.gov/image/126527>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission
Directorate (STMD)

Lead Organization:

Tendeg LLC

Responsible Program:

Small Business Innovation
Research/Small Business Tech
Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

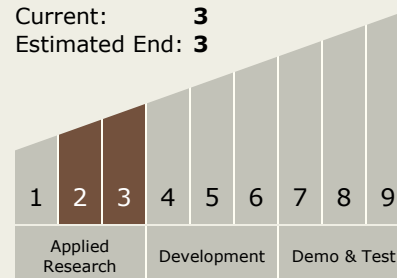
Gregg Freebury

Technology Maturity (TRL)

Start: 2

Current: 3

Estimated End: 3



Optical Shield for a Starshade Petal, Phase I

Completed Technology Project (2016 - 2016)



Technology Areas

Primary:

- TX08 Sensors and Instruments
 - └ TX08.2 Observatories
 - └ TX08.2.2 Structures and Antennas

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System